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Part VIII

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Occupational Safety and Health Administration

Occupational Safety and Health Hazards in Grain Handling Facilities; Request for Comments and Information and Notice of Informal Public Meetings

DEPARTMENT OF LABOR

Occupational Safety and Health Administration

29 CFR Parts 1910, 1918, 1926, and 1928

[Docket No. H-117]

Occupational Safety and Health Hazards in Grain Handling Facilities; Request for Comments and Information and Notice of Informal Public Meetings

AGENCY: Occupational Safety and Health Administration (OSHA).

ACTION: Request for comments and information and notice of informal public meetings.

SUMMARY: This notice requests comments and information regarding the regulation of occupational safety and health hazards found in grain handling facilities. In addition, this notice announces that OSHA will hold informal public meetings, as set forth below, to permit oral presentations of additional data and information concerning these hazards. The major safety hazards are fires and dust explosions. The health hazards include exposures to grain dust, both plant and animal matter (biological agents) associated with grain and dust, and pesticides. Although regarded primarly as a serious health hazard, pesticides may also affect the explosives properties of grain dust.

OSHA presently regulates certain safety hazards under standards in Subpart H (29 CFR Part 1910). These standards include provisions that cover safety hazards associated with compressed gases, flammable and combustible liquids, spray finishings, dip tanks, explosives and blasting agents, liquefied petroleum gases, and anhydrous ammonia. OSHA plans to revise its safety standards concerning hazardous materials under Subpart H (29 CFR 1910.101 through 1910.116). The revision may include the addition of new provisions to specifically cover operations such as those in grain handling facilities.

OSHA currently regulates exposures to grain dust under 29 CFR 1910.1000, Table Z-3. These regulations for "inert" or "nuisance dust", however, do not include provisions for exposure monitoring, specific personal protective equipment and other control measures. Studies indicate that exposure to grain dust may result in toxic effects.

OSHA also has permissible exposure limits for some 160 substances which may be used as pesticides (29 CFR 1910.1000, Tables Z-1 and Z-2). However, these standards cover only a small percentage of the total number of pesticides manufactured and formulated in this country. In addition, they only establish airborne concentration limits and general control requirements for the 160 pesticides, and do not address other protective measures such as exposure monitoring, specific personal protective equipment, and medical surveillance.

OSHA does not currently have specific standards regulating occupational exposures to harmful fungi, molds, bacteria or their toxins.

OSHA is hereby seeking written information on both the safety and health hazards associated with grain dust and grain dust exposures and on the factors that must be considered in determining how these hazards should be further regulated if OSHA decides that comprehensive standards for grain handling are necessary.

DATES: Notices of intention to appear at the public meetings as scheduled below must be recieved by March 24, 1980.

The informal public meetings are scheduled as follows:

1. April 15, 16, and 17, 1980, Superior, Wisconsin.

2. April 22, 23, and 24, 1980, Kenner, Louisiana.

3. April 29, 30, and May 1, 1980, Kansas City, Missouri.

The written information requested in this notice must be submitted on or before May 5, 1980.

ADDRESSES: Send all notices if intention to appear to Mr. Tom Hall, Division of Consumer Affairs, Room N3635, U.S. Department of Labor, Occupational Safety and Health Administration, 200 Constitution Avenue, N.W., Washington, D.C. 20210.

The written information requested in this notice should be submitted, in quadruplicate, to the Docket Officer, Docket No. H-117, Room S6212, U.S. Department of Labor, Occupational Safety and Health Administration, 200 Constitution Avenue, N.W., Washington, D.C. 20210 (202) 523-7894.

The Informal Public Meetings are scheduled as follows:

1. April 15, 16, and 17, 1980, Holiday Inn, Superior Room, 110 E. 2nd Street, Superior, Wisconsin 54880.

2. April 22, 23, and 24, 1980, Sheraton Inn, Kenner Room, 2150 Veteran's Boulevard, Kenner, Louisiana 70062.

3. April 29, 30 and May 1, 1980, Federal Building, Room 140, 601 E. 12th Street, Kansas City, Missouri 64108.

FOR FURTHER INFORMATION CONTACT:

Public Meetings

Mr. Tom Hall at the address above, (202) 523-8024.

Health

Dr. Flo Ryer, Director, Office of Special Standards Programs, Directorate of Health Standards Programs, Room N3663, Occupational Safety and Health Administration, 200 Constitution Avenue, NW., Washington, D.C. 20210, (202) 523-7174.

Safety

Mr. Thomas Seymour, Director, Office of Fire Protection Engineering Standards, Directorate of Safety Standards Programs, Room N3463, Occupational Safety and Health Administration, 200 Constitution Avenue, NW., Washington, D.C. 20210 (202-523-7216)

SUPPLEMENTARY INFORMATION:

Background

Grain dust is a mixture of plant fragments, seeds, pollen, minerals, and both living and dead organisms and waste products of organisms. The organisms include insect parts, molds, bacteria, and fungi and fungal spores. Grain dust is generated through all aspects of grain handling, such as harvesting, transportation, storage, conveying, processing, and packaging. Grain dust may be composed of mineral particulates and the particulates of organic material other than grain. Grain dust may be included with grain as part of the marketable raw material or sold as a separate commodity for feed and feed products.

Grain is often infested with weevils and other insects. Under certain conditions, it may also be contaminated with fungi and molds. These biological agents, as well as the pesticides (insecticides and fumigants) used to halt their growth, often pose serious health hazards to grain handlers.

Grain dust particles exhibit a variety of sizes, surface areas, capacitance, and aerodynamic properties. Grain dust particles can aggregate to form larger particles or concentrate in various levels. Because of its composition and physical nature, grain dust can be both toxic and hazardous.

Dust concentrations and particle sizes are factors which influence the potential for explosion. High concentrations of grain dust are fuel sources for either fires or grain dust explosions. The U.S. Bureau of Mines has performed tests that relate particle size to the explosibility of dusts. These tests indicate that as size decreases explosibility increases. Controlled

laboratory tests performed by the Bureau of Mines show that grain dust explosions occurred when 42 percent of the particles were less than 74 microns.

Particles less than 10 microns are of particular concern when considering health effects since they are capable of penetrating the deeper, more sensitive portions of the lung. Inhalation of various sizes of grain dust, ranging from less than 10 microns to as large as 200 microns, has been found to cause respiratory diseases such as emphysema, asthma, and bronchitis.

Pesticides commonly used in grain fumigation include carbon tetrachloride, methyl bromide, ethylene dichloride, ethylene dibromide, phostoxin, carbon disulfide and hydrocyanic acid gas. pesticides used in fumigation are most often chemicals which readily volatilize; however, residues may adsorb to grain dust and other conditions may exist which prevent the dissipation of these toxic chemicals. It is possible that pesticides adhering to the grain dust may alter the explosive characteristics of the dust. In addition, the adsorption of these pesticides onto grain dust particles may increse the severity of the toxic effects of the pesticide residues if they are carried and deposited deep within the lungs by inhalation of grain dust.

The Department of Agriculture has estimated that in 1979, 13 billion bushels of the major grains were produced in this country, requiring the use of approximately 15,000 grain elevators. There are an estimated 225,000 grain elevator workers who are exposed to grain dust. In addition, there are more than 450,000 grain processors who may also be exposed to grain dust.

OSHA Involvement and Activity

In January 1978, following a series of disastrous grain elevator explosions, OSHA focused its attention on the high concentrations of dust found in grain elevators and participated in hazard evaluation meetings with various industry and government representatives. OSHA then issued a Grain Elevator Industry Hazard Alert which contained information about both safety and health hazards. Although the immediate concern was to eliminate conditions that might cause explosions, the alert warned that the serious health hazards associated with grain elevator work may, in the long run, take many more lives than the grain dust explosions. This warning was based upon general information obtained from the NIOSH health hazard surveys of the grain industry. These reports are available from the Docket Officer at a the address given above.

OSHA is presently studying the available scientific literature concerning adverse health effects that result from exposures to grain dust, organic matter and the pesticides used in grain handling operations. Preliminary data indicates that exposures to the dust and organic matter can cause emphysema, chronic bronchitis, fibrosis of the lung, dermatitis, and various allergic reactions that affect both the lung ("farmer's lung") and the skin ("grain itch"). There is also evidence that aflatoxins associated with grain molds can cause cancer. Exposures to pesticides may also cause severe brain, liver, kidney and lung damage, and even death, in grain handling employees.

OSHA has contracted with the National Academy of Sciences (NAS) to study the safety problems in grain handling facilities. The NAS is studying the causes and the prevention of fires and explosions in the grain handling facilities. In addition to the OSHA-NAS effort, the National Institute for Occupational Safety and Health (NIOSH) is conducting similar research with an emphasis on the safety hazards in grain elevators and feed mills. OSHA is evaluating the data and information as it becomes available and will consider the recommendations of both the NAS and NIOSH.

Comments and Information Requested

OSHA has concluded that comprehensive occupational safety and health standards may be needed to protect employees from the hazards found in grain handling facilities. Consequently, OSHA requests all interested persons to submit written and oral comments relating to the need for developing regulations which address both the fire and explosion hazards associated with grain handling operations as well as the health hazards inherent in occupational exposure to grain dust, organic matter associated with grain, and the pesticides used to treat grain. OSHA's decision on the appropriateness of commencing rulemaking proceedings will be based on consideration of all written and oral comments received.

Written Comments

OSHA has developed twelve categories of questions that address both the safety and health hazards found in grain handling facilities, and hereby requests written comments and information on the following:

1. *General Safety Concerns.* (a) Should OSHA require material safety data sheets or equivalent forms that supply employees with basic information (e.g. manufacturer, chemical and trade name, physical and chemical properties, hazards, etc.) for hazardous materials used in grain handling facilities? What information should be contained in these material safety data sheets?

(b) Should OSHA require preplanning for workplace disasters as a part of written emergency action plans? Should such plans require planning and coordination with outside resources such as hospitals, ambulance services, and police and fire departments to ensure appropriate response to workplace disasters? What types and frequency of training should be required for employees who will be affected by such plans? What other elements should be considered for inclusion in such plans?

(c) Is there a synergistic effect between combustible dusts and fumigants which increases the potential for explosions?

(d) Is spontaneous combustion of grain a problem in grain handling facilities?

(e) Are grain elevators operating at overcapacity? What dangers may result from operating at overcapacity?

(f) Are there significant differences between the fire and explosion hazards of the various grain dusts? If so, which grain dusts would require specific provisions? What should be the content of these provisions?

(g) Should operators of grain handling facilities be required to conduct a system safety analysis of their operation? If so, what grain handling facilities should be affected by the requirement and why?

2. *General Health Concerns.* (a) To what extent are the dust, biological and pesticide hazards the same in all grain handling and processing industries?

(b) To what extent are these hazards different in the various grain handling and processing industries?

(c) What other hazards, such as exposures to chemicals used in processing grain, are found in these industries?

3. *Scope and Application.* The grain handling industry can be defined broadly to include all operations involved in processing grain products, from growth of the grain to shipment of the final product to the consumer, or be more narrowly defined to include only some of these operations.

OSHA requests comments and information on the following:

(a) Should the scope and application of a standard for safety and health hazards in grain handling facilities include all industries involved in grain handling or processing (such as grain elevators, grain milling, flour milling,

grain and rice drying, flour and soybean processing, cereal production, grain alcohol production, and the preparation of bakery and confections products)? Are there reasons for excluding any industry or operation?

(b) Are there any other industries that use grain or grain products in which employees risk exposures to these hazards?

4. *Control Measures for Dust Hazards.* OSHA is concerned with the dust hazards which affect employee safety and health in grain handling facilities.

OSHA requests comments and information on the following:

(a) *Preventive Measures.* (i) Should automatic shutdown be required when a segment of the grain handling system fails to function as intended (e.g. dust control equipment failure, bucket elevator slippage, electrical failure, choked legs or conveyors, grinding and milling machine breakdowns, overheated bearings) or when a fire occurs? How often do equipment failures occur?

(ii) Should heat sensor alarms for bearings be required? What bearings should be monitored and at what temperature should alarms activate? What types of sensors should be used?

(iii) Should there be overload relays on motors that stop drive pulleys to avoid over heating if belts slip or bucket elevators become clogged?

(iv) Should there be heat sensors over belt conveyors in galleries and tunnels? If so, where should they be placed and at what temperature should they be set to activate?

(v) Should there be speed indicators on bucket elevators and other conveyor belts to indicate when the speed is so slow that slippage of belts may occur thus causing overheating? At what speed does slippage become a hazard? What should be the alarm and shutdown procedures? Should there be belt alignment sensors? If so, what type?

(vi) Should explosion suppression systems be required in elevator legs, enclosed conveying equipment, grinding and milling machinery, and dust collection equipment? If so, why and what kind? What is the cost of such systems for these operations?

(vii) Should all grain handling facilities be required to have sprinkler system protection throughout the facility? Should the size of the facility determine whether sprinkler systems are necessary? Are sprinkler systems necessary for employee safety?

(viii) Should there be written shutdown procedures for choked legs, stalled conveyor belts or jammed milling machines? Should jogging (a method of shaking loose stalled bucket elevators which tends to suspend dust in air) be prohibited as a method of clearing equipment such as bucket elevators? Should there be written start-up procedures for when the problem is cleared? Should these written shutdown and start-up procedures be distributed to employees or posted at points of operation, or both?

(ix) What criteria should OSHA use to determine the fire resistance and electrical conductivity of conveyor belts? What test procedures should be used?

(x) Should OSHA require explosion venting? Where should the venting be placed and how should the amount of venting be determined? What costs are associated with explosion venting?

(xi) Should new bucket elevator legs be located outside of the main elevator structure? Would this reduce the fire and explosion hazard?

(xii) Should new bearings be located outside of the grain handling equipment, i.e. outside of the casing? Would this reduce the fire and explosion hazard?

(xiii) Should warehousing and bagged finished product facilities be maintained as separate areas from mills and other processing areas by a separate building or by an interior fire wall?

(xiv) Should horizontal surfaces be kept to a minimum to limit the surface area to be cleaned in new grain handling facilities? Should OSHA require that surfaces which are inaccessible for adequate cleaning be inclined not less than 60 degrees?

(b) *Dust Control.* (i) What design criteria should be used for dust control systems? Should the employer be required to receive a certified affidavit from the equipment supplier and installer that the dust control equipment meets the employer's specifications? Should an acceptance test be conducted to assure that newly installed dust control equipment functions properly?

(ii) Should dust collection equipment be of the two stage type, i.e. cyclone and fabric filter? Are there other types of collection systems that can effectively control grain dust emissions?

(iii) What engineering controls are currently used in grain handling facilities? How efficient are these controls in controlling dust emissions?

(iv) Are special dust controls necessary for those grain handling facilities that only store grain dust or process dust for feed?

(v) Should dust particles smaller than 40 microns (or some other size) be prohibited from being returned to the grain stream in any facility? What time period should OSHA allow for installation of dust collection systems?

(vi) What effects, if any, do the various handling operations have on the amount of dust that accumulates in the grain? Do these operations affect the size of the grain dust and consequently the efficiency of the dust collecting systems?

(vii) Should captured dust be stored away from grain handling facilities? How far away and in what manner?

(viii) Should there be a periodic inspection of dust control equipment to detect malfunctioning of the blower and exhaust system? If so, how often? What factors should be considered in such an inspection (e.g. checking the pressure drop across the fabric filter and monitoring the air velocity)? What pressure drop across a fabric filter should be permitted?

(ix) Should gauges on filters and collectors be read and recorded daily? If not daily, then how often?

(x) Would a modification of the U.S. Department of Agriculture's grading schedules for grain affect the concentrations of dust in the workplace? Could a grading schedule modification result in increased protection for employees?

(c) *Ignition Sources.* (i) Do static sparks generated by static electrical charges have enough energy to trigger an explosion in a grain handling facility? If so, what equipment in the facility should be designed to control static electrical charges? Should machinery and mechanical equipment be grounded to electrical system grounds? Should there be a periodic check for electrical ground? If so, how frequent?

(ii) Should grain handling facilities be equipped with lightning and voltage-surge protection? If so, who should be allowed to install such systems?

(iii) What factors and conditions could constitute hazardous areas in grain handling facilities that should be classified according to the Article 500 of the National Electrical Code (NFPA 70) as Class II, Division I or Division II hazardous locations? Under what conditions should a Division I location be reduced to a Division II location?

(iv) Should OSHA require the removal of tramp metal from the grain stream to decrease the possibility of fire and explosion due to tramp metal? Where should tramp metal collectors be required? What is the best method of removal? Are grates and screens with mesh of 1½ inches squared acceptable in lieu of magnetic collectors? What should be the maximum allowable time frame for the installation of tramp metal collectors? What is the cost of an installed tramp metal collector?

(v) Should specific smoking areas be designated in grain handling facilities or

should smoking be prohibited throughout the facility?

(vi) Should OSHA require nonsparking buckets on elevator legs? What time frame should be allowed for conversion from metal buckets? How much would this conversion cost?

(vii) Should the use of self-extinguishing PVC (polyvinyl chloride) belts be required for bucket elevators because of their propensity to soften and melt as opposed to burning? What time frame should be allowed for conversion?

(viii) Under what conditions should employees in grain handling facilities be required to wear static-free clothing and shoes? What is the cost of a set of static-free clothing?

(ix) What safety precautions should be specified for cutting and welding operations in grain handling facilities? Should a "hot work" permit system be required?

(x) Should the operation and construction of grain dryers be as described in Chapter 5 of the latest edition of NFPA Code 61–B, "Grain Elevators, Bulk Handling Facilities"? Should a phase-in period be granted to make the necessary changes? If so, how long?

(d) *Housekeeping and Maintenance.* (i) What is the best method of removing dust accumulations?

(ii) Do present industry practices include employing a spearate crew for housekeeping? If not, how does the grain industry manage housekeeping in their facilities? What housekeeping procedures are currently practiced by the industry?

(iii) Should removal of dust by the use of compressed air (blow down) be prohibited because of the suspended dust it creates? If not, under what conditions should it be permitted?

(iv) What measures should be included in a written preventive maintenance program?

(v) Should there be a periodic shutdown of grain handling oprations for maintenance? How often? Should continuous maintenance be required instead? How much down time will be needed for maintenance if there are periodic shutdowns of grain handling operations?

(vi) Is there an acceptable level of dust accumulation (layers of dust) in grain handling facilities? For instance, should 1/16 inch be an acceptable level of accumulated dust? Where and how should the level be measured?

(vii) Should the inside walls of grain elevators be painted to reduce dust adherence? Would the paint provide a surface for static electricity adhesion of dusts? Would dangerous static electricity potentials develop on painted surfaces?

(viii) Should all grain handling facilities be required to have pneumatic dust control systems? If so, why?

(ix) What procedures have been established to keep grain handling facilities clear of any decomposed or spoiled grain or processed material?

5. *Grain Dust Exposure.* One of the principal occupational health hazards of the grain industry is exposure to grain dust. OSHA requests comments and information on the following:

(a) At what level should OSHA set a permissible exposure limit for grain dust?

(b) Should OSHA set permissible exposure limits for total and respirable dust fractions?

(c) Should OSHA set limits for the different components of grain dust?

(d) To what extent do the following factors complicate the general assessment of occupational exposure: (1) The seasonal nature of grain handling work activity; (2) the variations in exposure during any given period; and (3) athe variability of physical and chemical composition of grain dust.

(e) To what levels of grain dust are employees of the grain handling industry currently exposed?

(f) Does the practice of returning dust back into the grain stream increase employee exposures to grain dust within the workplace?

(g) Are different dust levels generated by different operations? What dust levels are associated with the various operations?

(h) What kinds of personal protective equipment are used by the industry to reduce employee exposures to grain dust? To what extent is this equipment used?

(i) What is the yearly cost for providing personal protective equipment to control dust exposure?

(j) What are the standard operating procedures followed by industry for personal protective equipment programs?

6. *Pesticide Exposure.* Exposure to pesticides is the second major health hazard found in the grain handling facilities. Work practices and procedures can be designed to limit employee exposure to pesticide-treated grain and can reduce this hazard.

OSHA has permissible exposure limits for airborne concentrations of about 160 substances used as pesticides. In addition to these standards, the Environmental Protection Agency has regulations regarding the registration and application of pesticides. OSHA requests comments and information on the following:

(a) what kinds and amounts of pesticides are used in grain handling operations? In grain processing?

(b) How are pesticides applied to the grain?

(c) At what stages of grain handling are pesticides applied to the grain (e.g. unloading, loading, storage, moving through elevators, etc.)?

(d) What are the contents of labels or other warnings that currently appear on pesticides containers?

(e) Is grain often treated with pesticides before it arrives at the grain handling facilities? Do railcars and trucks containing pesticide-treated grain carry signs and placards that adequately warn of pesticide hazards?

(f) What procedures and work practices are used to prevent employee exposures to pesticides when employees unload incoming grain, enter bins, hopper cars or other confined spaces, or work in facilities that handle pesticide-treated grain?

(g) What type of testing is currently performed to measure pesticide exposure levels prior to unloading the grain, and before entering hopper cars, bins or other confined spaces? Besides testing for pesticides, are oxygen deficiency tests performed?

(h) What procedures and work practices are currently used to prevent employee exposures to pesticides during fumigation operations?

(i) To what extent does the industry use personal protective equipment to protect employees from pesticide exposure? During what procedures?

(j) What types of protective equipment are used to protect applicators of pesticides from pesticide hazards?

(k) What types of protective equipment are used to protect non-applicators of pesticides from the hazards of pesticide exposure?

(l) What personal protective equipment is used when employees probe or grade the grain?

(m) What is the cost per employee to provide him with personal protective equipment for pesticide protection?

(n) What health effects and symptoms have employees suffered upon exposures to pesticides?

(o) To what extent will protective measures to control exposures to grain dust also protect against pesticide exposure?

7. *Biological Agents Associated with Grain Dust.* (a) How should exposures to molds, fungi, bacteria and toxins be regulated?

(b) If dust emissions are controlled, will biological agents be controlled as well?

(c) Do decaying grains which have not been removed from work surfaces create additional biological hazards?

8. *Surveillance Procedures and Other Work Practices.* A comprehensive regulation to control employee exposures to occupational hazards in grain handling facilities would include work practices and procedures, precautions for safe use, exposure monitoring, and other provisions to ensure employee protection.

OSHA requests comments and information on the following:

(a) To what extent does the grain industry monitor grain handling facilities for employee dust exposure?

(b) To what extent does the grain industry monitor grain handling facilities for employee pesticide exposure?

(c) To what extent does the grain industry monitor grain handling facilities for employee exposures to other chemicals or substances used in grain processing?

(d) How often is monitoring done?

(e) What type of medical surveillance programs have been instituted by the industry?

(f) What specific medical tests are performed to evaluate the health of the grain handlers?

(g) Should grain handlers be given pulmonary functions tests and skin sensitivity tests? If so, how often?

(h) What personal protective equipment is used by employees cleaning up dust, grain or spilled pesticides?

(i) What general hygiene practices are followed by the industry?

9. *Employee Training.* (a) How often and to what extent should employees handling grain be trained in recognizing safety and health hazards? What elements should be included in the training?

(b) What specific training should be given in the use of personal protective equipment and clothing? How often?

(c) How often should safety and health meetings be conducted?

10. *Fire Protection and Means of Emergency Escape.* (a) Should there be periodic fire drills in grain handling facilities? How often?

(b) Should a standpipe and hose system be required in grain handling facilities? Where should it be located?

(c) Should OSHA require the use of a fire alarm system in grain handling facilities?

(d) Should employees attempt to fight incipient fires in grain handling facilities? If so, under what conditions?

(e) Should emergency lighting be required in grain handling facilities?

(f) Should OSHA recognize special means of emergency escape from grain handling facilities? For example, should ladders be an acceptable means of emergency escape from the tops of silos, galleries, and headhouses?

11. *Economic and Environmental Impact.* If OSHA determines that regulation of the safety and health hazards in grain handling facilities is necessary, then a formal regulatory analysis may be required. OSHA requests comments and information on the following:

(a) What would be the economic impact of a regulation to control employee exposure to the health hazards in grain handling facilities? What benefits would result from such a regulation?

(b) What would be the economic impact of a regulation to prevent fires and explosions in grain handling facilities? What benefits would result from such a regulation?

(c) What would be the environmental impact of regulating the safety and health hazards in grain handling facilities?

(d) What are the current costs of maintaining the safety and health of employees in grain handling facilities? Please include indications of costs for labor, capital, maintenance, training, medical surveillance, and appropriate control measures.

12. *Miscellaneous.* OSHA requests comments and information on the following related topics:

(a) Should the health hazards found in grain handling facilities be addressed in a separate health standard or combined with safety standard provisions to form a comprehensive standard for grain handling facilities?

(b) Should the health hazard regulations be three separate standards specific for grain dust, pesticides, and biological agents?

(c) Should OSHA regulate the safety hazards in performance or goal-oriented standards which would be designed to provide more flexible compliance practices? How could this be achieved?

(d) What test methods and certification criteria are necessary for personal protective equipment to be used in grain handling facilities?

(e) Are currently available personal protective equipment and clothing effective and suitable for conditions found in grain handling facilities or is additional research necessary?

(f) What machine guards are necessary for grinding and milling operations, conveyor equipment and related machinery in grain handling and processing facilities? What types of machine guards have been found to be effective and why?

Public Meetings

In order to provide an informal forum in which interested persons can orally present comments and information regarding the hazards discussed in this notice, OSHA has scheduled three public meetings as follows:

1. April 15, 16, and 17, 1980, Holiday Inn, Superior Room, 110 E. 2nd Street, Superior, Wisconsin 54880.

2. April 22, 23, and 24, 1980, Sheraton Inn, Kenner Room, 2150 Veteran's Boulevard, Kenner, Louisiana 70062.

3. April 29, 30, and May 1, 1980, Federal Building, Room 140, 601 E. 12th Street, Kansas City, Missouri 64108.

Each meeting will begin promptly at 9:00 a.m., will recess from 12 noon until 1:30 p.m., and then continue until 5:00 p.m. The chairperson of each meeting will be a representative of the U.S. Department of Labor designated by the Assistant Secretary, and will have the necessary authority to regulate the conduct of the meetings.

OSHA requests that any person wishing to make oral presentations notify OSHA in advance. The notice should identify the person and/or organization intending to testify, the amount of time requested for oral presentation, the subject matter, and a brief summary of the intended oral presentation. All persons giving written advance notice will have time reserved for oral presentations. Persons who do not submit advance notice, but still wish to testify, are requested to register at the meeting they attend.

As long as time permits, all persons who wish to be heard will be allowed to make oral presentations. However, priority will be given to those who register in advance.

All persons desiring to participate in the public meetings must file a notice of intention to appear, by March 24, 1980, addressed to Mr. Tom Hall, Division of Consumer Affairs, Room N3635, U.S. Department of Labor, Occupational Safety and Health Administration, 200 Constitution Avenue, NW., Washington, D.C. 20210. All written comments requested in the notice should be submitted in quadruplicate, to the Docket Officer, Docket No. H–117, Room S6212, U.S. Department of Labor, Occupational Safety and Health Administration, 200 Constitution Avenue, NW., Washington, D.C.20210. All written and oral submissions, as well as other information gathered by the agency, will be considered in any action taken.

This document was prepared under the direction of Eula Bingham, Assistant

Secretary of Labor for Occupational Safety and Health, U.S. Department of Labor, 200 Constitution Avenue, NW., Washington, D.C. 20210.

(Sec. 6 Pub. L. 91–596, 84 Stat. 1593 (29 U.S.C. 655) 29 CFR Part 1911; Secretary of Labor Order No. 8–76 (41 FR 25059)

Signed at Washington, D.C., this 12th day of February, 1980.

Eula Bingham,

Assistant Secretary of Labor.

[FR Doc. 80–5038 Filed 2–14–80; 8:45 am]

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